

REMARKS/ARGUMENTS

In the third non-Final Official Action, claims 1-17 are rejected. Claim 2 has been cancelled without prejudice, claims 1 and 3-17 amended and newly written claim 18 offered for consideration. Therefore, claims 1 and 3-18 are the only claims remaining in this application.

The Examiner's acknowledgment and agreement with applicants' arguments in the Appeal Brief is appreciated. The Examiner's new objection to claim 2 has been obviated by the cancellation of this claim. The subject matter has been rewritten as newly written claim 18 and consideration thereof is respectfully requested.

Claims 1-17 stand rejected under 35 USC §112 (second paragraph) as being indefinite. However, applicants presume that the indefiniteness of claims 3-17 is because those claims ultimately depend from claim 1 inasmuch as the only specific allegation of indefiniteness is with respect to claims 1 and 2. Claim 2 has been cancelled without prejudice, thereby obviating any further objection to this claim.

Claim 1 stands rejected under 35 USC §112 (second paragraph) as being indefinite for failing to "particularly point out and distinctly claim how the two light emitting means convert the input current of electrons into a *single* beam of output radiation." (Emphasis in original). Applicants have reviewed the language of appealed claim 1 and find no indication that the Examiner's quoted language occurs in applicants' claim. The claim has no reference to there being a "single" beam of output radiation. In fact, the last line of the claim states that the light emitting means do not share a common optical waveguide, and

therefore the outputted beams of radiation could not possibly be in a single beam at least in an optical waveguide.

Furthermore, applicants note that, because the language of claim 1 is in means-plus-function form, by statute the Examiner must refer to the corresponding structure in the specification, and it is that structure and equivalents thereto that is spelled out in the claim using the "means-plus-function" statutory shortcut. Accordingly, any further objection or rejection of claim 1 under 35 USC §112 is respectfully traversed. Applicants have made several minor changes and corrections in claim 1 in order to overcome any potential indefiniteness in the future.

Claims 1-17 stand rejected under 35 USC §103 as unpatentable over Edwards (WO 96/08857) and Kushibe (U.S. Patent 4,928,285). The comments regarding the Kushibe reference set forth in applicants' previously filed Appeal Brief are herein incorporated by reference. The Examiner's analysis of the Edwards reference is generally correct, and the Examiner's admission that Edwards "fails to teach the light emitting means have a respective optical waveguide and are arranged optically such that the light emitting means do not share a common optical waveguide" is very much appreciated.

However, the Examiner's statement that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the laser of Kushibe et al in the laser emitting device of Edwards, since Edwards teach the use of a laser that is a single mode laser diode/LED . . . and Kushibe et al teach a single mode

laser diode/LED" (Official Action paragraph bridging pages 4 and 5) is without support.

The Examiner will further appreciate that the Kushibe reference does not teach more than one laser. Instead it is directed towards a single improved laser device, and there is no mention of having two or more active regions or even any subdivision of an active region in Kushibe, from which one concludes it is a single light emitting structure. How then the Examiner contends that Kushibe teaches more than one light emitting means where each has a respective optical waveguide and is arranged so as to not share with another light emitting means a common optical waveguide is not seen and clarification is respectfully requested.

As previously discussed, the Kushibe reference is not relevant to the claimed invention. The Kushibe reference is concerned with achieving a single mode output, achieved by doping an active layer with impurities so that they can find only certain light components when the device is operating (see Kushibe column 2, lines 29-36). This last effect confirms that the device will lose some of the radiation generated in the device in order to produce single wavelength operation. This loss of radiation inherently establishes that the device will be less efficient in terms of total output than devices which are not doped so as to lose radiation.

Remembering that Kushibe teaches a lower efficiency operation so as to provide wavelength output, Edwards specifically requires light emitting diodes (LED's) of the **highest possible efficiency** (see page 13, line 25 to page 14, line 2). Clearly one of

ordinary skill in the art looking to modify the device in Edwards (with the highest possible efficiency) would clearly avoid the teachings of Kushibe with its suggestion of operation at a significantly lower efficiency (so as to achieve single wavelength operation).

Therefore, not only are the two references not combinable, but they would lead one of ordinary skill in the art away from the combination. Applicants note that the Examiner has again failed to provide any suggestion or motivation for combining features of the Edwards and Kushibe references, and therefore the rejection of claim 1, and claims dependent thereon, clearly fails.

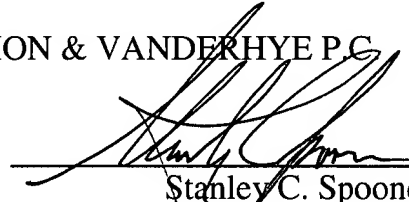
Even though claim 2 has been cancelled without prejudice, the subject matter has been submitted as newly written claim 18 and consideration of this claim is respectfully requested. Claim 18 establishes that the light emitting device comprises at least two light emitting apparatuses, each of the apparatuses including at least one light emitting means and at least one of the apparatuses including at least two light emitting means connected in parallel. The two light emitting apparatuses are electrically connected in series so as to provide the benefits set out in the claim. The light emitting apparatuses are arranged optically so that light from one of the light emitting means is not transmitted to another of the light emitting means. These interrelationships are clearly absent from Kushibe, as it fails to teach multiple light emitting structures and is clearly absent from Edwards which suggests that any light emitting structures are all arranged in series. Consideration of newly written claim 18 is respectfully requested.

Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1 and 3-18 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of these claims, he is respectfully requested to contact applicant's undersigned representative.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:



Stanley C. Spooner
Reg. No. 27,393

SCS:kmm
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100